

STATE OF TENNESSEE **DEPARTMENT OF HEALTH ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL Lab Services - Jackson Regional Lab Jackson, TN 38301 731-426-0686

TDH: Lab Services KRL Lab Services - Knoxville Regional Lab Knoxville, TN 37920 865-549-5201

TDH: Lab Services NCL Lab Services - Nashville Central Lab Nashville, TN 37243 615-262-6300

Sent To:

Greg Denton

TDEC-WPC

6th Floor, L & C Tower Annex

401 Church Street

Nashville, TN 37243-1534

Michael Atchley

TDEC-WPC

Knoxville FO

3711 Middlebrook Pike Knoxville, TN 37921

K00002107 Lab ID:

Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code:

327.34-20

This is to certify that the following results were determined using good laboratory pratices and in accordance with federal or state approved methodologies.

K00002107001

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 4.0

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

EMORY004.0RO

Date/Time Collected:

01/15/2009 10:30

Sampler's Name: County:

Larry Everett

Sample Matrix:

ROANE - 73

EFO:

Water Knoxville

Sampling Agency:

TDEC-WPC 327.34-20

Billing Code: Send Report To: Agency Invoiced:

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

6.84

pH Units

Chlorine, residual:

Conductivity:

37

uMHO

Temperature:

4.99

Dissolved Oxygen: 10.29

mg/L

Other:

Flow:

CFS

| TEST: Alkalinity, Total | ME | | | | | |
|-------------------------|--------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 13 | mg/L | 3.8 | 10 | S Burchfield | 1/17/2009 |

| TEST: Hardness, Calcium | MET | | | | | |
|-------------------------|--------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 13 | mg/L | 0.7 | 1 | M Chen | 1/16/2009 |

| TEST: Residue, Settleable | MET | THOD: SM 254 | 0F | | | | |
|---------------------------|--------|--------------|------|------|--------------|-----------|--|
| ANALYTE | RESULT | UNITS MDL | | MQL | ANALYZED BY: | DATE | |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | M Chen | 1/16/2009 | |

| TEST: Residue, Suspended | METHOD: SM 2540D | | | | | |
|--------------------------|------------------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | S Burchfield | 1/17/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107002

Project Name:

TVA-Ash Spill

Sample Description:

Sampler Project Name: TVA Ash Spill

Emory River mile 2.1

Project Site No.:

Station No.:

EMORY002.1RO

Date/Time Collected:

01/15/2009 10:45

Sampler's Name: County:

Larry Everett ROANE - 73

Sample Matrix:

Water

EFO:

Knoxville

Sampling Agency: Billing Code:

TDEC-WPC 327.34-20

Send Report To: Agency Invoiced:

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

7.75

pH Units

uMHO

Chlorine, residual: **Conductivity:**

Temperature:

79 4.11

Dissolved Oxygen: 6.98

mg/L

Other:

Flow:

CFS

| TEST: Alkalinity, Total | MET | THOD: EPA 31 | | | | |
|-------------------------|--------|--------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 23 | mg/L | 3.8 | 10 | S Burchfield | 1/17/2009 |

| TEST: Hardness, Calcium | ME: | THOD: SM 350 | 0-Ca D | | | |
|-------------------------|--------|--------------|--------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 20 | mg/L | 0.7 | 1 | M Chen | 1/16/2009 |

| TEST: Residue, Settleable | MET | THOD: SM 254 | | | | |
|---------------------------|--------|--------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL. | MQL | ANALYZED BY: | DATE |
| Settleable Residue | 0.8 | ml/L | 0.10 | 0.10 | M Chen | 1/16/2009 |

| TEST: Residue, Suspended | METHOD: SM 2540D | | | | | | |
|--------------------------|------------------|------|-----|-----|--------------|-----------|--|
| ANALYTE | RESULT UNITS | | MDL | MQL | ANALYZED BY: | DATE | |
| Total Suspended Solids | 610 | mg/L | 10 | 10 | S Burchfield | 1/17/2009 | |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107003

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 2.1 duplicate

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

EMORY002.1RO-FD

Date/Time Collected: Sampler's Name:

01/15/2009 10:46

County:

Larry Everett ROANE - 73

Sample Matrix:

Water

EFO:

Knoxville

Sampling Agency: Billing Code:

TDEC-WPC 327.34-20 TDEC-WPC

Send Report To: Agency Invoiced:

TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

pH: Chlorine, residual:

Field Determinations

Conductivity: Temperature: **Dissolved Oxygen:**

Other:

Flow:

CFS

| TEST: Alkalinity, Total | METHOD: EPA 310.2 | | | | | | |
|-------------------------|-------------------|-------|-----|-----|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Total Alkalinity | 21 | mg/L | 3.8 | 10 | S Burchfield | 1/17/2009 | |

| TEST: Hardness, Calcium | ME | THOD: SM 350 | 0-Ca D | | | |
|-------------------------|--------|--------------|--------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 19 | mg/L | 0.7 | 1 | M Chen | 1/16/2009 |

| TEST: Residue, Settleable | ME | METHOD: SM 2540F | | | | |
|---------------------------|--------|------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | 0.6 | ml/L | 0.10 | 0.10 | M Chen | 1/16/2009 |

| METHOD: SM 2540D | | | | | |
|------------------|--------|--------------|------------------|----------------------|-----------------------------------|
| RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| 610 | mg/L | 10 | 10 | S Burchfield | 1/17/2009 |
| | RESULT | RESULT UNITS | RESULT UNITS MDL | RESULT UNITS MDL MQL | RESULT UNITS MDL MQL ANALYZED BY: |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107004

Project Name:

TVA-Ash Spill

Sample Description:

Emory River 2.1 Field Blank

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

Date/Time Collected:

EMORY002.10RO-FB 01/15/2009 10:47

Sampler's Name:

Larry Everett

County:

ROANE - 73

Sample Matrix:

Water

EFO:

Knoxville

Sampling Agency: Billing Code:

TDEC-WPC 327.34-20

Send Report To: Agency Invoiced:

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

Chlorine, residual: Conductivity: Temperature: **Dissolved Oxygen:**

Other:

Flow:

CFS

| TEST: Alkalinity, Total | MET | | | | | |
|-------------------------|--------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | U | mg/L | 3.8 | 10 | S Burchfield | 1/17/2009 |

| TEST: Hardness, Calcium METHOD: SM 3500-Ca D | | | | | | |
|--|--------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | U | mg/L | 0.7 | 1 | M Chen | 1/16/2009 |

| TEST: Residue, Settleable | ME | | | | | |
|---------------------------|--------|-------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | M Chen | 1/16/2009 |

| TEST: Residue, Suspended | METHOD: SM 2540D | | | | | |
|--------------------------|------------------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | U | mg/L | 10 | 10 | S Burchfield | 1/18/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107005

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 1.7

Sampler Project Name: TVA Ash Spill

Thory River fille 1.

Project Site No.:

0. 1 **1** 7

Station No.:

EMORY001.7RO

Date/Time Collected:

01/15/2009 11:15

Sampler's Name: County:

Larry Everett ROANE - 73

Sample Matrix:

Water

EFO:

Vvater Knoxville

Sampling Agency: Billing Code:

TDEC-WPC 327.34-20

Send Report To:
Agency Invoiced:

TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

7.14

pH Units

Chlorine, residual:

Conductivity: Temperature:

39

5.20

uMHO

Other:

Dissolved Oxygen: 11.38

mg/L

Flow: CFS

| TEST: Alkalinity, Total METHOD: EPA 310.2 | | | | | | | |
|---|-----------------|------|-----|-----|--------------|-----------|--|
| ANALYTE | RESULT UNITS MD | | MDL | MQL | ANALYZED BY: | DATE | |
| Total Alkalinity | 12 | mg/L | 3.8 | 10 | S Burchfield | 1/18/2009 | |

| TEST: Hardness, Calcium | MET | | | | | |
|-------------------------|--------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 13 | mg/L | 0.7 | 1 | M Chen | 1/16/2009 |

| TEST: Residue, Settleable METHOD: SM 2540F | | | | | | |
|--|--------|-------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | M Chen | 1/16/2009 |

| TEST: Residue, Suspended METHOD: SM 2540D | | | | | | | |
|---|--------------|------|---------|----|--------------|-----------|--|
| ANALYTE | RESULT UNITS | | MDL MQL | | ANALYZED BY: | DATE | |
| Total Suspended Solids | U | mg/L | 10 | 10 | S Burchfield | 1/17/2009 | |

J - Estimated value between MDL and MQL

MDL. - Method Detection Limit

MQL - Method Quantitation Limit

K00002107006

Project Name:

TVA-Ash Spill

Sample Description:

Sampler Project Name: TVA Ash Spill

Emory River mile 0.1

Project Site No.:

Station No.:

EMORY000.1RO

Date/Time Collected:

01/15/2009 11:35

Sampler's Name: County:

Larry Everett

ROANE - 73

Sample Matrix: EFO:

Water

Sampling Agency:

Knoxville

Billing Code: Send Report To: TDEC-WPC 327.34-20 TDEC-WPC

Agency Invoiced:

TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

7.19

pH Units

Chlorine, residual:

Conductivity:

42

uMHO

mg/L

Temperature:

5.09

Dissolved Oxygen: 9.05

Other:

Flow:

CFS

| TEST: Alkalinity, Total METHOD: EPA 310.2 | | | | | | | |
|---|--------|------------------|-----|-----|--------------|-----------|--|
| ANALYTE | RESULT | RESULT UNITS MDL | | MQL | ANALYZED BY: | DATE | |
| Total Alkalinity | 15 | mg/L | 3.8 | 10 | S Burchfield | 1/18/2009 | |

| TEST: Hardness, Calcium | METHOD: SM 3500-Ca D | | | | | |
|-------------------------|----------------------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 15 | mg/L | 0.7 | 1 | M Chen | 1/16/2009 |

| TEST: Residue, Settleable | METHOD: SM 2540F | | | | | | |
|---------------------------|------------------|-------|------|------|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Settleable Residue | 0.6 | ml/L | 0.10 | 0.10 | M Chen | 1/16/2009 | |

| TEST: Residue, Suspended METHOD: SM 2540D | | | | | | |
|---|--------------|------|-----|-----|--------------|-----------|
| ANALYTE | RESULT UNITS | | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | 150 | mg/L | 10 | 10 | S Burchfield | 1/17/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107007

Project Name:

TVA-Ash Spill

Sample Description:

Clinch River mile 2.3 near Hwy 70 bridge

Project Site No.:

Sampler Project Name: TVA Ash Spill

Station No.:

CLINC002.3RO

Date/Time Collected:

01/15/2009 11:50

Sampler's Name: County:

Larry Everett ROANE - 73

Sample Matrix:

EFO:

Water

Sampling Agency:

Knoxville TDEC-WPC

Billing Code: Send Report To: Agency Invoiced:

327.34-20 TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

7.48

pH Units

uMHO

Chlorine, residual:

Conductivity: Temperature: 136

9.28

Dissolved Oxygen: 11.09 mg/L

Other:

Flow:

CFS

| TEST: Alkalinity, Total | MET | THOD: EPA 31 | 0.2 | | | |
|-------------------------|--------|--------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 91 | mg/L | 3.8 | 10 | S Burchfield | 1/18/2009 |

| TEST: Hardness, Calcium | MET | THOD: SM 350 | 0-Ca D | · · | | |
|-------------------------|--------|--------------|--------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 73 | mg/L | 0.7 | 1 | M Chen | 1/16/2009 |

| TEST: Residue, Settleable | WE. | THOD: SM 254 | 0F | | | |
|---------------------------|--------|--------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Settleable Residue | U | ml/L | 0.10 | 0.10 | M Chen | 1/16/2009 |

| TEST: Residue, Suspended | ME. | THOD: SM 254 | 0D | | | |
|--------------------------|--------|--------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Suspended Solids | 13 | mg/L | 10 | 10 | S Burchfield | 1/17/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit



STATE OF TENNESSEE DEPARTMENT OF HEALTH **ENVIRONMENTAL LABORATORIES**

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TDH: Lab Services KRL Lab Services - Knoxville Regional Lab Knoxville, TN 37920 865-549-5201

TDH: Lab Services NCL Lab Services - Nashville Central Lab Nashville, TN 37243 615-262-6300

Sent To:

Greg Denton

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Michael Atchley

TDEC-WPC

Knoxville FO

3711 Middlebrook Pike

Knoxville, TN 37921

Lab ID: K00002107

Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code:

327.34-20

This is to certify that the following results were determined using good laboratory pratices and in accordance with federal or state approved methodologies.

Analytical Supervisor

K00002107001

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 4.0

Sampler Project Name: TVA Ash Spill

Project Site No.:

1

Station No.:

EMORY004.0RO

Date/Time Collected: Sampler's Name:

01/15/2009 10:30

County:

Larry Everett

Sample Matrix:

ROANE - 73

EFO:

Water Knoxville TDEC-WPC 327.34-20

Sampling Agency: **Billing Code: Send Report To:** Agency Invoiced:

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

6.84

Chlorine, residual:

Conductivity:

37 4.99

uMHO

pH Units

Temperature: Dissolved Oxygen: 10.29

mg/L

Other: Flow:

| TEST: Digestion Metals | MET | HOD: EPA 20 | 0.2 | | | |
|------------------------|------------|-------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 01/17/2009 | | | | M Pattanayek | 1/17/2009 |

| TEST: ICP | | METHOD: EPA 2 | 200.7 | | | |
|-----------|--------|---------------|-------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 160 | µg/L | 2.9 | 10 | M Pattanayek | 1/20/2009 |

| TEST: ICP-MS | ME. | THOD: EPA 20 | 0.8 | | | |
|--------------|--------|--------------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 150 | μg/L | 6.4 | 10 | M Pattanayek | 1/19/2009 |
| Antimony | 2.0 | μg/L | 0.33 | 1 | M Pattanayek | 1/17/2009 |
| Arsenic | U | μg/L | 0.93 | 5 | M Pattanayek | 1/17/2009 |
| Barium | 24 | μg/L | 2.5 | 5 | M Pattanayek | 1/17/2009 |
| Beryllium | U | μg/L | 0.11 | 1 | M Pattanayek | 1/17/2009 |
| Cadmium | U | μg/L | 0.41 | 1 | M Pattanayek | 1/17/2009 |
| Chromium | U, | μg/L | 2.0 | 5 | M Pattanayek | 1/17/2009 |
| Cobalt | 0.28J | μg/L | 0.04 | 1 | M Pattanayek | 1/17/2009 |
| Copper | 3.2 | μg/L | 0.38 | • 1 | M Pattanayek | 1/17/2009 |
| Lead | 0.33J | μg/L | 0.10 | 1 | M Pattanayek | 1/17/2009 |
| Manganese | 33 | μg/L | 0.42 | 1 | M Pattanayek | 1/17/2009 |
| Nickel | 0.74J | μg/L | 0.25 | 1 | M Pattanayek | 1/17/2009 |
| Selenium | U | μg/L | 1.3 | 5 | M Pattanayek | 1/17/2009 |
| Silver | · U | μg/L | 0.03 | 0.25 | M Pattanayek | 1/17/2009 |
| Thallium | 0.20J | μg/L | 0.03 | 1 | M Pattanayek | 1/17/2009 |
| Vanadium | U | μg/L | 3.4 | 5 | M Pattanayek | 1/17/2009 |
| Zinc | 6.4 | μg/L | 1.9 | 5 | M Pattanayek | 1/17/2009 |

K00002107001

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 4.0

Sampler Project Name: TVA Ash Spill

Project Site No.:

1

Station No.:

Date/Time Collected:

EMORY004.0RO 01/15/2009 10:30

Sampler's Name:

Larry Everett

County:

ROANE - 73

Sample Matrix: EFO:

Water

Sampling Agency:

Knoxville TDEC-WPC 327.34-20

Billing Code: **Send Report To:** Agency Invoiced:

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

| p | | |
|--------------------------|-------|------|
| Dissolved Oxygen: | 10.29 | mg/L |
| Othor | | • |

6.84

37

4.99

Field Determinations

Chlorine, residual:

Conductivity:

Temperature:

Other: Flow:

pH:

CFS

pH Units

uMHO

| TEST: Mercury | ME | THOD: EPA 24 | 5.1 | | | |
|---------------|--------|--------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | , U | μg/L | 0.13 | 0.2 | A Wilson | 1/17/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107002

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 2.1

Sampler Project Name: TVA Ash Spill

Project Site No.:

1

Station No.:

EMORY002.1RO

Date/Time Collected:

01/15/2009 10:45

Sampler's Name: County:

Larry Everett ROANE - 73

Sample Matrix:

Water

EFO: Sampling Agency: Knoxville TDEC-WPC

Billing Code: Send Report To: Agency Invoiced: 327.34-20 TDEC-WPC **TDEC-WPC**

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH: 7.75

Chlorine, residual:

Conductivity: 79

4.11

uMHO

pH Units

Temperature:

Dissolved Oxygen: 6.98

mg/L

Other: Flow:

| TEST: Digestion Metals | MET | HOD: EPA 20 | 0.2 | | | *** ********************************** |
|------------------------|------------|-------------|-----|-----|--------------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 01/17/2009 | | | | M Pattanayek | 1/17/2009 |

| TEST: ICP | ME | THOD: EPA 20 | 0.7 | | | · · · · · · · · · · · · · · · · · · · |
|-----------|--------|--------------|-----|-----|--------------|---------------------------------------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 1700 | μg/L | 2.9 | 10 | M Pattanayek | 1/20/2009 |

| TEST: ICP-MS | ME ⁻ | THOD: EPA 20 | 0.8 | | | |
|--------------|-----------------|--------------|-------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 4000 | μg/L | 6.4 | 10 | M Pattanayek | 1/19/2009 |
| Antimony | 1.4 | μg/L | 0.33 | 1 | M Pattanayek | 1/17/2009 |
| Arsenic | 43 | μg/L | 0.93 | 5 | M Pattanayek | 1/17/2009 |
| Barium | 210 | μg/L | 2.5 | 5 | M Pattanayek | 1/17/2009 |
| Beryllium | 0.99J | μg/L | 0.11 | 1 | M Pattanayek | 1/17/2009 |
| Cadmium | U | μg/L | 0.41 | 1 | M Pattanayek | 1/17/2009 |
| Chromium | · 11 | μg/L | 2.0 | 5 | M Pattanayek | 1/17/2009 |
| Cobalt | 2.2 | μg/L | 0.04 | 1 | M Pattanayek | 1/17/2009 |
| Copper | 13 | μg/L | 0.38 | 1 | M Pattanayek | 1/17/2009 |
| Lead | 4.3 | μg/L | 0.10 | 1 | M Pattanayek | 1/17/2009 |
| Manganese | 53 | μg/L | 0.42 | 1 | M Pattanayek | 1/17/2009 |
| Nickel | 4.0 | μg/L | 0.25 | 1 | M Pattanayek | 1/17/2009 |
| Selenium | Ú. | μg/L | . 1.3 | 5 | M Pattanayek | 1/17/2009 |
| Silver | Ü | μg/L | 0.03 | 0.25 | M Pattanayek | 1/17/2009 |
| Thallium | 0.79J | μg/L | 0.03 | 1 | M Pattanayek | 1/17/2009 |
| Vanadium | 42 | μg/L | 3.4 | 5 | M Pattanayek | 1/17/2009 |
| Zinc | 8.8 | μg/L | 1.9 | 5 | M Pattanayek | 1/17/2009 |

K00002107002

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 2.1

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

1

EMORY002.1RO

Date/Time Collected:

01/15/2009 10:45

Sampler's Name:

Larry Everett

County:

ROANE - 73

Sample Matrix:

Water

EFO: Sampling Agency:

Knoxville **TDEC-WPC**

Billing Code: Send Report To: Agency Invoiced: 327.34-20 TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009

Received By:

TEST: Mercury

Ken Hitchman

13:55

| METHOD: | EPA | 245.1 | |
|---------|------------|-------|--|

Field Determinations

Dissolved Oxygen: 6.98

Chlorine, residual:

Conductivity:

Temperature:

7.75

79

4.11

pH Units

uMHO

mg/L

CFS

:Ha

Other:

Flow:

ANALYTE RESULT UNITS MDL MQL **ANALYZED BY:** DATE U 0.13 μg/L 0.2 A Wilson Mercury 1/17/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107003

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 2.1 duplicate

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

Date/Time Collected:

EMORY002.1RO-FD

Sampler's Name:

01/15/2009 10:46

County:

Larry Everett **ROANE - 73**

Sample Matrix:

Water

EFO:

Knoxville TDEC-WPC

Sampling Agency: Billing Code: Send Report To:

Agency Invoiced:

327.34-20 TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

Chlorine, residual: Conductivity: Temperature: **Dissolved Oxygen:**

Other:

Flow:

| TEST: Digestion Metals | MET | HOD: EPA 20 | | | | |
|------------------------|------------|-------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 01/17/2009 | | | | M Pattanayek | 1/17/2009 |

| TEST: ICP METHOD: EPA 200.7 | | | | | | | |
|-----------------------------|--------|-------|-----|-----|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Iron | 2200 | μg/L | 2.9 | 10 | M Pattanayek | 1/20/2009 | |

| TEST: ICP-MS | ME. | METHOD: EPA 200.8 | | | | | |
|--------------|--------|-------------------|-------|------|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Aluminum | 5600 | μg/L | 128.0 | 200 | M Pattanayek | 1/19/2009 | |
| Antimony | 1.2 | μg/L | 0.33 | 1 | M Pattanayek | 1/17/2009 | |
| Arsenic | 43 | μg/L | 0.93 | 5 | M Pattanayek | 1/17/2009 | |
| Barium | 230 | μg/L | 2.5 | 5 | M Pattanayek | 1/17/2009 | |
| Beryllium | 1.2 | μg/L | 0.11 | 1 | M Pattanayek | 1/17/2009 | |
| Cadmium | U | μg/L | 0.41 | 1 | M Pattanayek | 1/17/2009 | |
| Chromium | 12 | μg/L | 2.0 | 5 | M Pattanayek | 1/17/2009 | |
| Cobalt | 2.9 | μg/L | 0.04 | 1 | M Pattanayek | 1/17/2009 | |
| Copper | 16 | μg/L | 0.38 | 1 | M Pattanayek | 1/17/2009 | |
| Lead | 6.0 | μg/L | 0.10 | 1 | M Pattanayek | 1/17/2009 | |
| Manganese | 56 | μg/L | 0.42 | 1 | M Pattanayek | 1/17/2009 | |
| Nickel | 5.4 | μg/L | 0.25 | 1 | M Pattanayek | 1/17/2009 | |
| Selenium | U | μg/L | 1.3 | 5 | M Pattanayek | 1/17/2009 | |
| Silver | U | μg/L | 0.03 | 0.25 | M Pattanayek | 1/17/2009 | |
| Thallium | 0.88J | μg/L | 0.03 | 1 | M Pattanayek | 1/17/2009 | |
| Vanadium | 45 | μg/L | 3.4 | 5 | M Pattanayek | 1/17/2009 | |
| Zinc | 10.0 | μg/L | 1.9 | 5 | M Pattanayek | 1/17/2009 | |

K00002107003

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 2.1 duplicate

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

EMORY002.1RO-FD

Date/Time Collected:

01/15/2009 10:46

Sampler's Name: County:

Larry Everett

Sample Matrix:

ROANE - 73

EFO:

Water Knoxville

Sampling Agency: Billing Code: Send Report To:

TDEC-WPC 327.34-20 **TDEC-WPC**

Agency Invoiced: Priority Date:

TDEC-WPC

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

Chlorine, residual: Conductivity: Temperature:

Dissolved Oxygen:

Other:

Flow:

CFS

| TEST: Mercury | ME. | | | | | |
|---------------|--------|-------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | μg/L | 0.13 | 0.2 | A Wilson | 1/17/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107004

Project Name:

TVA-Ash Spill

Sample Description:

Emory River 2.1 Field Blank

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

Date/Time Collected:

EMORY002.10RO-FB

Sampler's Name:

01/15/2009 10:47

County:

Larry Everett **ROANE - 73**

Sample Matrix:

Water

EFO: Sampling Agency:

Knoxville TDEC-WPC 327.34-20

Billing Code: Send Report To: Agency Invoiced:

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

:Hq

Chlorine, residual: Conductivity: Temperature: **Dissolved Oxygen:**

Other:

Flow:

| TEST: Digestion Metals | MET | HOD: EPA 20 | 0.2 | | | ,,,,, |
|------------------------|------------|-------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 01/17/2009 | | | | M Pattanayek | 1/17/2009 |

| TEST: ICP METHOD: EPA 200.7 | | | | | | | |
|-----------------------------|--------|-------|-----|-----|--------------|-----------|--|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | |
| Iron | U | μg/L | 2.9 | 10 | M Pattanayek | 1/20/2009 | |

| TEST: ICP-MS | WE. | | | | | |
|--------------|----------------|-------|------|------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | U | µg/L | 6.4 | 10 | M Pattanayek | 1/17/2009 |
| Antimony | U | μg/L | 0.33 | 1 | M Pattanayek | 1/17/2009 |
| Arsenic | U | μg/L | 0.93 | 5 | M Pattanayek | 1/17/2009 |
| Barium | U | μg/L | 2.5 | 5 | M Pattanayek | 1/17/2009 |
| Beryllium | · U | μg/L | 0.11 | 1 | M Pattanayek | 1/17/2009 |
| Cadmium | U | μg/L | 0.41 | 1 | M Pattanayek | 1/17/2009 |
| Chromium | U | μg/L | 2.0 | 5 | M Pattanayek | 1/17/2009 |
| Cobalt | _. u | μg/L | 0.04 | 1 | M Pattanayek | 1/17/2009 |
| Copper | U | μg/L | 0.38 | 1 | M Pattanayek | 1/17/2009 |
| Manganese | U | µg/L | 0.42 | 1 | M Pattanayek | 1/17/2009 |
| Nickel | U | μg/L | 0.25 | 1 | M Pattanayek | 1/17/2009 |
| Selenium | U | μg/L | 1.3 | 5 | M Pattanayek | 1/17/2009 |
| Silver | U | μg/L | 0.03 | 0.25 | M Pattanayek | 1/17/2009 |
| Thallium | 0.06J | μg/L | 0.03 | 1 | M Pattanayek | 1/17/2009 |
| Vanadium | U | μg/L | 3.4 | 5 | M Pattanayek | 1/17/2009 |
| Zinc | U | μg/L | 1.9 | 5 | M Pattanayek | 1/17/2009 |

| TEST: Mercury | MET | THOD: EPA 24 | 5.1 | | | |
|---------------|--------|--------------|-----|-----|--------------|------|
| ÄNALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |

K00002107004

Project Name:

TVA-Ash Spill

Sample Description:

Emory River 2.1 Field Blank

Sampler Project Name: TVA Ash Spill

Project Site No.:

1

Station No.:

EMORY002.10RO-FB

Date/Time Collected:

01/15/2009 10:47

Sampler's Name: County:

Larry Everett

Sample Matrix:

ROANE - 73 Water

EFO: Sampling Agency: Knoxville TDEC-WPC 327.34-20

Billing Code: Send Report To: **Agency Invoiced:**

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations pH:

Chlorine, residual: Conductivity: Temperature: **Dissolved Oxygen:**

Other:

Flow:

CFS

| TEST: Mercury | ME | | | | | |
|---------------|--------|-------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | μg/L | 0.13 | 0.2 | A Wilson | 1/17/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107005

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 1.7

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

EMORY001.7RO

Date/Time Collected: Sampler's Name:

01/15/2009 11:15

County:

Larry Everett **ROANE - 73**

Sample Matrix:

EFO:

Water Knoxville TDEC-WPC

Sampling Agency: **Billing Code:** Send Report To:

Agency Invoiced:

327.34-20 TDEC-WPC **TDEC-WPC**

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH:

7.14

pH Units

Chlorine, residual:

Conductivity:

39 5.20 uMHO

Temperature: **Dissolved Oxygen: 11.38**

mg/L

Other: Flow:

| TEST: Digestion Metals | • | MET | HOD: EPA 20 | | | | |
|------------------------|---|------------|-------------|-----|-----|--------------|-----------|
| ANALYTE | - | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | | 01/17/2009 | | | - | M Pattanayek | 1/17/2009 |

| TEST: ICP | ME | THOD: EPA 20 | 0.7 | | | · · · · · · · · · · · · · · · · · · · |
|-----------|--------|--------------|-----|-----|--------------|---------------------------------------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 220 | μg/L | 2.9 | 10 | M Pattanayek | 1/20/2009 |

| TEST: ICP-MS | ME. | METHOD: EPA 200.8 | | | | |
|--------------|------------|-------------------|------|------|--------------|-----------|
| ANALYTE | RESULT | RESULT UNITS MDL | | MQL | ANALYZED BY: | DATE |
| Aluminum | 240 | μg/L | 6.4 | 10 | M Pattanayek | 1/19/2009 |
| Antimony | U | μg/L | 0.33 | 1 | M Pattanayek | 1/17/2009 |
| Arsenic | U | μg/L | 0.93 | 5 | M Pattanayek | 1/17/2009 |
| Barium | 25 | μg/L | 2.5 | 5 | M Pattanayek | 1/17/2009 |
| Beryllium | U | μg/L | 0.11 | 1 | M Pattanayek | 1/17/2009 |
| Cadmium | U | μg/L | 0.41 | 1 | M Pattanayek | 1/17/2009 |
| Chromium | U | μg/L | 2.0 | 5 | M Pattanayek | 1/17/2009 |
| Cobalt | 0.29J | μg/L | 0.04 | 1 | M Pattanayek | 1/17/2009 |
| Copper | 2.6 | μg/L | 0.38 | 1 | M Pattanayek | 1/17/2009 |
| Lead | 0.42J | μg/L | 0.10 | 1 | M Pattanayek | 1/17/2009 |
| Manganese | 32 | μg/L | 0.42 | 1 | M Pattanayek | 1/17/2009 |
| Nickel | 0.68J | μg/L | 0.25 | 1 | M Pattanayek | 1/17/2009 |
| Selenium | U | μg/L | 1.3 | 5 | M Pattanayek | 1/17/2009 |
| Silver | U | μg/L | 0.03 | 0.25 | M Pattanayek | 1/17/2009 |
| Thallium | 0.04J | μg/L | 0.03 | 1 | M Pattanayek | 1/17/2009 |
| Vanadium | . u | μg/L | 3.4 | 5 | M Pattanayek | 1/17/2009 |
| Zinc | 5.7 | μg/L | 1.9 | 5 | M Pattanayek | 1/17/2009 |

K00002107005

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 1.7

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

Date/Time Collected:

EMORY001.7RO

Sampler's Name:

01/15/2009 11:15 Larry Everett

County:

ROANE - 73

Sample Matrix: EFO:

Water

Sampling Agency:

Knoxville TDEC-WPC

Billing Code: Send Report To: Agency Invoiced:

327.34-20 **TDEC-WPC TDEC-WPC**

Priority Date:

Date/Time Received:

01/15/2009

Received By:

Ken Hitchman

13:55

Field Determinations

Dissolved Oxygen: 11.38

Chlorine, residual:

Conductivity:

Temperature:

7.14

39

5.20

pH Units

uMHO

mg/L

CFS

:Ha

Other:

Flow:

| TEST: Mercury | MET | | | | | |
|---------------|--------|-------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | .U | μg/L | 0.13 | 0.2 | A Wilson | 1/17/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107006

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 0.1

Sampler Project Name: TVA Ash Spill

Project Site No.:

1

Station No.:

EMORY000.1RO

Date/Time Collected:

01/15/2009 11:35

Sampler's Name:

Larry Everett

County: Sample Matrix: ROANE - 73

EFO:

Water

Sampling Agency:

Knoxville TDEC-WPC 327.34-20

Billing Code: Send Report To: Agency Invoiced:

TDEC-WPC TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

:Hq

7.19

pH Units

Chiorine, residual:

Conductivity:

42 5.09 uMHO

Temperature: **Dissolved Oxygen: 9.05**

mg/L

Other: Flow:

| TEST: Digestion Metals | METHOD: EPA 200.2 | | | | | |
|------------------------|-------------------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 01/17/2009 | | | | M Pattanayek | 1/17/2009 |

| TEST: ICP | MET | METHOD: EPA 200.7 | | | | |
|-----------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 680 | μg/L | 2.9 | 10 | M Pattanayek | 1/20/2009 |

| TEST: ICP-MS | MET | | | | | |
|--------------|--------|-------|------|----------------|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Aluminum | 820 | μg/L | 6.4 | 10 | M Pattanayek | 1/19/2009 |
| Antimony | U | μg/L | 0.33 | 1 | M Pattanayek | 1/17/2009 |
| Arsenic | 4.7J | μg/L | 0.93 | 5 | M Pattanayek | 1/17/2009 |
| Barium | 54 | μg/L | 2.5 | 5 | M Pattanayek | 1/17/2009 |
| Beryllium | 0.20J | μg/L | 0.11 | 1 | M Pattanayek | 1/17/2009 |
| Cadmium | .√U | μg/L | 0.41 | 1 | M Pattanayek | 1/17/2009 |
| Chromium | 2.8J | μg/L | 2.0 | 5 | M Pattanayek | 1/17/2009 |
| Cobalt | 1.0 | μg/L | 0.04 | 1 | M Pattanayek | 1/17/2009 |
| Copper | 3.7 | μg/L | 0.38 | 1 | M Pattanayek | 1/17/2009 |
| Lead | 1.3 | μg/L | 0.10 | 1 | M Pattanayek | 1/17/2009 |
| Manganese | 77 | μg/L | 0.42 | 1 | M Pattanayek | 1/17/2009 |
| Nickel | 1.6 | μg/L | 0.25 | [*] 1 | M Pattanayek | 1/17/2009 |
| Selenium | U | μg/L | 1.3 | 5 | M Pattanayek | 1/17/2009 |
| Silver | U | μg/L | 0.03 | 0.25 | M Pattanayek | 1/17/2009 |
| Thallium | 0.12J | μg/L | 0.03 | 1 | M Pattanayek | 1/17/2009 |
| Vanadium | 3.5J | μg/L | 3.4 | 5 | M Pattanayek | 1/17/2009 |
| Zinc | 7.5 | μg/L | 1.9 | 5 | M Pattanayek | 1/17/2009 |

K00002107006

Project Name:

TVA-Ash Spill

Sample Description:

Emory River mile 0.1

Sampler Project Name: TVA Ash Spill

Project Site No.:

1

Station No.:

EMORY000.1RO

Date/Time Collected:

01/15/2009 11:35

Sampler's Name: County:

Larry Everett **ROANE - 73**

Sample Matrix:

Water

EFO: Sampling Agency: Knoxville TDEC-WPC 327.34-20

Billing Code: Send Report To: Agency Invoiced:

TDEC-WPC **TDEC-WPC**

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations :Ha 7.19

Chlorine, residual:

42

pH Units

uMHO

Conductivity:

Temperature:

5.09

mg/L

Dissolved Oxygen: 9.05 Other: Flow:

CFS

| TEST: Mercury | ME | - V | | | | |
|---------------|--------|----------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | μg/L | 0.13 | 0.2 | A Wilson | 1/17/2009 |
| | | | | | | |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

K00002107007

Project Name:

TVA-Ash Spill

Sample Description:

Clinch River mile 2.3 near Hwy 70 bridge

Sampler Project Name: TVA Ash Spill

Project Site No.:

1

Station No.:

CLINC002.3RO

Date/Time Collected: Sampler's Name:

01/15/2009 11:50

County:

Larry Everett

Sample Matrix:

ROANE - 73 Water

EFO: Sampling Agency: Knoxville TDEC-WPC 327.34-20 TDEC-WPC

Billing Code: Send Report To: Agency Invoiced:

TDEC-WPC

Priority Date:

Date/Time Received:

01/15/2009 13:55

Received By:

Ken Hitchman

Field Determinations

pH: 7.48

Chlorine, residual:

Conductivity: 136

Temperature: 9.28 Dissolved Oxygen: 11.09

Other: Flow:

mg/L

uMHO

pH Units

| TEST: Digestion Metals | MET | HOD: EPA 20 | 0.2 | | | |
|------------------------|------------|-------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 01/17/2009 | | | | M Pattanayek | 1/17/2009 |

| TEST: ICP METHOD: EPA 200.7 | | | | | | |
|-----------------------------|--------|-------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Iron | 260 | μg/L | 2.9 | 10 | M Pattanayek | 1/20/2009 |

| TEST: ICP-MS | ME | METHOD: EPA 200.8 | | | | |
|--------------|----------------|-------------------|------|-----------------|--------------|-----------|
| ANALYTE | RESULT | RESULT UNITS MDL | | MQL ANALYZED BY | | DATE |
| Aluminum | 250 | μg/L | 6.4 | 10 | M Pattanayek | 1/19/2009 |
| Antimony | U | μg/L | 0.33 | 1 | M Pattanayek | 1/17/2009 |
| Arsenic | U | μg/L | 0.93 | 5 | M Pattanayek | 1/17/2009 |
| Barium | 34 | μg/L | 2.5 | . 5 | M Pattanayek | 1/17/2009 |
| Beryllium | U | μg/L | 0.11 | 1 | M Pattanayek | 1/17/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | M Pattanayek | 1/17/2009 |
| Chromium | U | μg/L | 2.0 | 5 | M Pattanayek | 1/17/2009 |
| Cobalt | 0.27J | μg/L | 0.04 | 1 | M Pattanayek | 1/17/2009 |
| Copper | 1.6 | μg/L | 0.38 | 1 | M Pattanayek | 1/17/2009 |
| Lead | 0.50J | μg/L | 0.10 | 1 | M Pattanayek | 1/17/2009 |
| Manganese | 46 | μg/L | 0.42 | 1 | M Pattanayek | 1/17/2009 |
| Nickel | 0. 61 J | μg/L | 0.25 | 1 | M Pattanayek | 1/17/2009 |
| Selenium | U | μg/L | 1.3 | 5 | M Pattanayek | 1/17/2009 |
| Silver | · U | μg/L | 0.03 | 0.25 | M Pattanayek | 1/17/2009 |
| Thallium | 0.03J | μg/L | 0.03 | 1 | M Pattanayek | 1/17/2009 |
| Vanadium | U | μg/L | 3.4 | 5 | M Pattanayek | 1/17/2009 |
| Zinc | 2.9J | μg/L | 1.9 | 5 | M Pattanayek | 1/17/2009 |

K00002107007

Project Name:

TVA-Ash Spill

Sample Description:

Clinch River mile 2.3 near Hwy 70 bridge

Sampler Project Name: TVA Ash Spill

Project Site No.:

Station No.:

CLINC002.3RO

Date/Time Collected: Sampler's Name:

01/15/2009 11:50

County:

Larry Everett

Sample Matrix:

ROANE - 73

EFO: Sampling Agency: Water Knoxville

Billing Code: Send Report To: TDEC-WPC 327.34-20 TDEC-WPC TDEC-WPC

Agency Invoiced: **Priority Date:**

Date/Time Received:

01/15/2009 13:55

Received By:

TEST: Mercury ANALYTE Mercury

Ken Hitchman

| METHOD: EPA 245.1 | | | | | | | | | |
|-----------------------|-------|------|-----|--------------|-----------|--|--|--|--|
| RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE | | | | |
| 11 | na/l | 0.13 | U 3 | A Wileon | 1/17/2000 | | | | |

Field Determinations

Dissolved Oxygen: 11.09

Chlorine, residual: Conductivity:

Temperature:

pH:

Other:

Flow:

7.48

136

9.28

pH Units

uMHO

mg/L

CFS

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit